UNITED STATES PATENT AND TRADEMARK OFFICE

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10/689,370	10/20/2003	Chuxin Chen	28787.70	2855

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>14 March 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>10/20/2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Double Patenting

1.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2.   Claims 1-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Chen et al. (U.S. Patent No. 6,668,241, hereinafter '241) in view of Husseiny (U.S. Patent No. 5210704). Both references deal with essentially the same method and system for monitoring equipment in a telecommunications network, as shown in Table 1 below:

Table 1

#10/689,370 claims	#US 6,668,241 B2 claims
1. A system for monitoring equipment in a telecommunications network, the system comprising: a monitor set including at least one of either a subset of the equipment, a review	1. A system for monitoring equipment in a telecommunications network, the system comprising: a monitor set including at least one of either a subset of the equipment, a review

period, or a configuration for the equipment; a plurality of rules related to the monitor set, <u>wherein the rules include at least one rule usable to predict exhaustion of the equipment;</u> means for obtaining data related to the monitor set; and a program for creating one or more analytical reports about the monitor set based on the rules and the data, wherein the analytical report includes a prediction of exhaustion of the equipment, wherein the program includes: an inference engine having instructions for retrieving the data from a data layer of an inventory retrieval system, determining if a match exists between the data and one or more of the rules, if a match exists, firing the rule on the data to produce an analysis and formatting the analysis into the analytical reports.	period, or a configuration for the equipment; a plurality of rules related to the monitor set; means for obtaining data related to the monitor set; and a program for creating one or more analytical reports about the monitor set based on the rules and the data, wherein the program comprises: an inference engine comprising instructions for retrieving the data from a data layer of an inventory retrieval system, determining if a match exists between the data and one or more of the rules, if a match exists, firing the rule on the data to produce an analysis, and formatting the analysis into the analytical reports, and wherein at least one of the analytical reports is in the form of a job justification story. 2. A computer program ..... 7. The computer program of claim 2 wherein at least one of the analytical reports indicates a predicted exhaust condition.
2. The system of claim 1 wherein the at least one rule usable to predict exhaustion of the equipment includes a projected lifetime of the equipment.	
3. The system of claim 2 wherein the at least one rule usable to predict exhaustion of the equipment includes a capacity of the equipment.	9. The computer program of claim 7 wherein the predicted exhaust condition is in the form of a demand and capacity chart.

4. A method for monitoring equipment in a telecommunications system and predicting when the equipment will be exhausted, the method comprising: selecting a configuration for the equipment; <u>defining a review for the selected configuration, the review identifying one or more rules usable to calculate exhaustion of the equipment;</u> <u>obtaining equipment related data using a separate inventory system;</u> <u>requesting the retrieval of the obtained data for the defined review so that the data can be compared to the one or more rules;</u> <u>and receiving a comparison of the data and the review.</u>	4. The computer program of claim 2 ..... 5. The computer program of claim 4 wherein the third interface portion allows the user to select a configuration for the equipment from a list of predetermined possible configurations.
5. The method of claim 4 wherein identifying the one or more rules usable to calculate exhaustion of the equipment includes identifying at least one of a lifetime of the equipment and a capacity of the equipment.	
6. <u>The method of claim 4 wherein the review further identifies a review interval and/or a notification preference and wherein the data can also be compared to the review interval and/or the notification preference.</u>	4. The computer program of claim 2 wherein the user interface provides a display screen comprising: ...... a second interface portion for allowing the user to select a review period; and ...... 8. The computer program of claim 7 further comprising a remote notification program interface for reporting at least one of the analytical reports to the user through an automatic email operation.

7. The method of claim 4 wherein the configuration is selected from a list of predetermined possible configurations.	5. The computer program of claim 4 wherein the third interface portion allows the user to select a configuration for the equipment from a list of predetermined possible configurations.
8. The method of claim 4 wherein identifying one or more rules comprises: selecting a rule from a rule tree according to a rule set definition, the rule comprising an antecedent and a consequent; and modifying either or both of the antecedent and the consequent of the selected rule.	6. The computer program of claim 2 wherein the user interface provides a display screen comprising: a first interface portion for allowing the user to select a rule from a rule tree according to a rule set definition, the rule comprising an antecedent and a consequent; and a second interface portion for allowing the user to modify either or both of the antecedent and the consequent of the selected rule.
9. The method of claim 4 further comprising receiving the comparison as an analyzed conclusion provided through an email operation.	8. The computer program of claim 7 further comprising a remote notification program interface for reporting at least one of the analytical reports to the user through an automatic email operation.

Table 1 shown above lists the literal difference between the claims 1, 3, 4 and 6-9 in the instant application (hereinafter '370) and the claims 1, 2 and 4-9 in '241. It is obvious that the '241 patent discloses the claimed invention recited in claims 1, 3, 4 and 6-12 of '370 except the limitations in claims 2 and 5 and the underlined portion in claims 1, 4 and 6.

The teaching of Husseiny includes: a rule-based monitoring expert system, wherein the rules include at least one rule usable to predict exhaustion of the equipment (col. 6, lines 9-19; col. 16, lines 38-56); wherein at least one rule usable to predict exhaustion of the equipment includes a projected lifetime of the equipment (col. 6, lines

9-19; col. 16, lines 38-56; col. 21, lines 14-41); defining a review for the selected

configuration, the review identifying one or more rules usable to calculate exhaustion of

the equipment (cols. 14-15, lines 64-10; col. 16, lines 38-55; col. 18, lines 3-19);

obtaining equipment related data using a separate inventory system (col. 13, lines 8-30;

col. 18, lines 23-27); requesting the retrieval of the obtained data for the defined review

so that the data can be compared to the one or more rules (col. 13, lines 8-30; col. 18,

lines 23-53); and receiving a comparison of the data and the review (col. 13, lines 31-

35; col. 18, lines 23-53); wherein identifying the one or more rules usable to calculate

exhaustion of the equipment includes identifying at least one of a lifetime of the

equipment and a capacity of the equipment (col. 6, lines 9-19; col. 16, lines 38-56; col.

21, lines 14-41); and, wherein the review further identifies a review interval and/or a

notification preference and wherein the data can also be compared to the review

interval and/or the notification preference (cols. 10-11, lines 62-18; cols. 14-15, lines 64-

2).

It would have been obvious to one having ordinary skill in the art at the time was

made to include the teachings of Husseiny in the invention of '241 in order to provide a

better rule-based monitoring expert system that is capable of examining the

predictability of the system for predicting future trends and estimates of remaining life of

an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6,

lines 9-19; col. 16, lines 38-56).

3.   Claims 10-12 and 18 are rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claims 1, 2, 7 and 9 of

U.S. Patent No. 6,668,241 B2 to Chen et al. Although the conflicting claims are not

identical, they are not patentably distinct from each other because they essentially claim

patentably the same invention, as shown in Table 2 below.

Table 2

#10/689,370 claims	#US 6,668,241 B2 claims
10. A system for monitoring equipment in a telecommunications network, the system comprising: a monitor set including at least one of either a subset of the equipment, a review period, or a configuration for the equipment; a plurality of rules related to the monitor set, wherein at least one rule enables a prediction of equipment exhaustion; means for obtaining data related to the monitor set; and a program for creating one or more analytical reports about the monitor set based on the rules and the data, wherein at least one of the analytical reports details a relationship between demand and capacity for at least a portion of the equipment.	1. A system for monitoring equipment in a telecommunications network, the system comprising: a monitor set including at least one of either a subset of the equipment, a review period, or a configuration for the equipment; a plurality of rules related to the monitor set; means for obtaining data related to the monitor set; and a program for creating one or more analytical reports about the monitor set based on the rules and the data, wherein the program comprises: an inference engine comprising instructions for retrieving the data from a data layer of an inventory retrieval system, determining if a match exists between the data and one or more of the rules, if a match exists, firing the rule on the data to produce an analysis, and formatting the analysis into the analytical reports, and wherein at least one of the analytical reports is in the form of a job justification story. 2. A computer program for monitoring ......

	7. The computer program of claim 2 wherein at least one of the analytical reports indicates a predicted exhaust condition.
18. The system of claim 10 wherein the at least one rule usable to predict exhaustion of the equipment includes a capacity of the equipment.	9. The computer program of claim 7 wherein the predicted exhaust condition is in the form of a demand and capacity chart.
11. The system of claim 10 further comprising a graphical user interface for receiving additional rules from a user and for providing the additional rules to the program.	2. A computer program for monitoring at least one piece of equipment in a telecommunications network, the computer program comprising: a user interface for receiving one or more rules from a user and for providing one or more analytical reports of the equipment based on the rules; ......
12. The system of claim 10 wherein the program comprises an inference engine comprising instructions for retrieving the data from a data layer of an inventory retrieval system, determining if a match exists between the data and one or more of the rules, if a match exists, firing the rule on the data to produce an analysis, and formatting the analysis into the analytical reports,	1. A system for monitoring equipment in a telecommunications network, the system comprising: ...... a program for creating one or more analytical reports about the monitor set based on the rules and the data, wherein the program comprises: an inference engine comprising instructions for retrieving the data from a data layer of an inventory retrieval system, determining if a match exists between the data and one or more of the rules, if a match exists, firing the rule on the data to produce an analysis, and formatting the analysis into the analytical reports, and wherein at least one of the analytical reports is in the form of a job justification story. 2. A computer program .....

	7. The computer program of claim 2
wherein the analytical report includes a prediction of equipment exhaustion.	wherein at least one of the analytical reports indicates a predicted exhaust condition.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 2 and 13-15 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kekic et al. (U.S. Pat. No. 5999179) in view of Husseiny (U.S. Patent

No. 5210704).

Regarding claim 1, Kekic et al. teach a system for monitoring equipment in a

telecommunications network (see abstract), the system comprising: a monitor set

including at least one of either a subset of the equipment (col. 6, lines 14-39), a review

period (col. 18, lines 19-32 and col. 20, lines 19-21), or a configuration for the

equipment (col. 46, lines 36-52); a plurality of rules related to the monitor set (col. 23,

lines 63-67 and col. 24, lines 20-28); means for obtaining data related to the monitor set

(col. 8, lines 16-41; col. 15, lines 49-67; col. 18, lines 12-32, lines 45-55; col. 19, lines 1-

7; col. 28, lines 6-8 and col. 36, lines 15-27); and a program for creating one or more

analytical reports about the monitor set based on the rules and the data (cols. 7-8, lines

61-41; cols. 27-28, lines 44-8); said program comprises: an inference engine having

instructions for retrieving the data from a data layer of an inventory retrieval system (col.

3, lines 9-28; col. 16, lines 55-60; col. 18, lines 12-32, lines 45-55; col. 19, lines 1-7),

determining if a match exists between the data and one or more of the plurality of rules

and selectively firing the rule on the data to produce an analysis, and to create the one

or more analytical reports (col. 8, lines 16-41 and col. 36, lines 15-27).

Kekic et al. do not mention expressly that: said rules include at least one rule

usable to predict exhaustion of the equipment; wherein the one or more analytical

reports include a prediction of exhaustion of the equipment.

Husseiny teaches a rule-based monitoring expert system, wherein the rules

include at least one rule unable to predict exhaustion of the equipment (col. 6, lines 9-

19; col. 16, lines 38-56); one or more analytical reports which include a prediction of

exhaustion of the equipment (col. 6, lines 9-19; col. 16, lines 38-56; col. 21, lines 14-41).

It would have been obvious to one having ordinary skill in the art at the time was

made to include the teachings of Husseiny in the invention of Kekic et al. in order to

provide a better rule-based monitoring system that is capable of examining the

predictability of the system for predicting future trends and estimates of remaining life of

an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6,

lines 9-19; col. 16, lines 38-56).

Regarding claim 2, Kekic et al. disclose the system includes the subject matter

discussed above except: wherein the at least one rule usable to predict exhaustion of

the equipment includes a projected lifetime of the equipment.

Husseiny teaches a rule-based monitoring expert system, wherein the at least one rule usable to predict exhaustion of the equipment includes a projected lifetime of the equipment (col. 6, lines 9-19; col. 16, lines 38-56).

It would have been obvious to one having ordinary skill in the art at the time was made to include the teachings of Husseiny in the invention of Kekic et al. in order to provide a better rule-based monitoring system that is capable of examining the predictability of the system for predicting future trends and estimates of remaining life of an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6, lines 9-19; col. 16, lines 38-56).

Regarding claims 13-15, the teaching of Kekic further includes: wherein the configuration for the equipment is selected from a list of predetermined possible configurations (col. 15, lines 49-56; cols. 44-45, lines 58-8); wherein the rules are organized in a tree structure (col. 24, lines 20-28); wherein at least one of the rules includes an antecedent and a consequent (col. 49, lines 13-55; cols. 69-70, lines 7-6).

6.   Claims 3 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kekic et al. in view of Husseiny, as applied to claim 1 above and further in view of Pisello et al. (U.S. Pat. No. 5678042).

Kekic et al. teach a system that includes the subject matter discussed above except: wherein the at least one rule usable to predict exhaustion of the equipment includes a capacity of the equipment.

Pisello et al. disclose a network management system, and teach a program for creating one or more analytical reports about the monitor set, wherein at least one of

the analytical reports details a relationship between demand and capacity for at least a

portion of the equipment (see Figs. 3A-B and 4A-B; col. 17, lines 19-43, lines 50-64 and

col. 21, lines 55-62).

It would have been obvious to one having ordinary skill in the art at the time the

invention was made to include the teaching of Pisello et al. analytical report in the

combination of Kekic and Husseiny in order to recognize a variety of current status

problems and perform various trend analysis on said equipment (Pisello et al., col. 17,

lines 19-21).

7.   Claims 4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kekic et al. in view of Husseiny and Bergholm et al. (U.S. Pat. No. 5761432).

Regarding claim 4, Kekic et al. teach a method for monitoring

telecommunications equipment (see abstract), the method comprising: selecting a

configuration for the equipment (see Figs. 37A-37E; col. 46, lines 36-52; col. 54, lines 5-

67 and col. 62, lines 7-9); defining a review for the selected configuration, the review

identifying one or more rules (see Figs. 37F-37M; col. 20, lines 19-34; cols. 27-28, lines

44-8 and col. 69, lines 7-67); obtaining equipment related data using a separate

inventory system (col. 8, lines 16-41; col. 15, lines 49-67; col. 18, lines 12-32, lines 45-

55; col. 19, lines 1-7; col. 28, lines 6-8 and col. 36, lines 15-27); requesting the retrieval

of the obtained data for the defined review so that the data can be compared to the one

or more rules (col. 8, lines 16-41; col. 15, lines 49-67; col. 18, lines 12-32, lines 45-55;

col. 19, lines 1-7; col. 28, lines 6-8 and col. 36, lines 15-27); and receiving a comparison

of the data and the review (col. 7, lines 61-67; col. 8, lines 1-41; cols. 27-28, lines 44-8; col. 53, lines 57-67 and col. 54, lines 1-4).

Kekic et al. do not mention expressly that: said rules unable to calculate exhaustion of the equipment; obtaining equipment related data using a separate inventory system.

The teaching of Husseiny includes: a rule-based monitoring expert system, wherein the rules include at least one rule usable to calculate exhaustion of the equipment (col. 6, lines 9-19; col. 16, lines 38-56).

It would have been obvious to one having ordinary skill in the art at the time was made to include the teachings of Husseiny in the invention of Kekic et al. in order to provide a better rule-based monitoring expert system that is capable of examining the predictability of the system for predicting future trends and estimates of remaining life of an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6, lines 9-19; col. 16, lines 38-56).

Bergholm et al. disclose a method and system for providing an efficient use of telecommunication network resources, and teach the step and means of obtaining equipment related data using a separate inventory system (see Abstract; Fig. 1; col. 1, lines 15-27; col. 2, line 64 to col. 3, line 5; col. 3, lines 30-45, lines 63-67; col. 5, lines 8-13; col. 7, lines 14-40 and col. 15, lines 42-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Bergholm inventory system in the Kekic

system in order to monitor the network equipments located in various control pointes more efficiently (Bergholm et al., col. 1, lines 15-27).

Regarding claim 6, Kekic et al. do not mention: wherein the review further identifies a review interval and/or a notification preference and wherein the data can also be compared to the review interval and/or the notification preference.

The teaching of Husseiny includes: a review interval and/or a notification preference and wherein the data can also be compared to the review interval and/or the notification preference (cols. 10-11, lines 62-18; cols. 14-15, lines 64-2).

It would have been obvious to one having ordinary skill in the art at the time was made to include the teachings of Husseiny in the invention of Kekic et al. in order to provide a better rule-based monitoring expert system that is capable of examining the predictability of the system for predicting future trends and estimates of remaining life of an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6, lines 9-19; col. 16, lines 38-56).

Regarding claims 7 and 8, the teaching of Kekic et al. further includes: said configuration is selected from a list of predetermined possible configurations (see Figs. 37A-37E and col. 37, lines 20-50; col. 50, lines 64-67 ad col. 51, lines 1-7); said step of identifying one or more rules comprises: selecting a rule from a rule tree according to a rule set definition (col. 23, lines 63-67 and col. 24, lines 20-28), the rule comprising an antecedent and a consequent (col. 6, lines 49-56; col. 69, lines 8-15); and modifying either or both of the antecedent and the consequent of the selected rule (col. 40, lines 34-67; col. 41, lines 1-3, lines 24-33, lines 63-67; col.42, lines 1-24).

Regarding claim 9, the Examiner takes official notice that an automatic email operation is a well-known practice in the art to communicate with a remote user. It would have been obvious to include such a feature in the method of Kekic et al. as one of the notification formats for the purpose of reporting said comparison results to remote users.

8.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kekic et al. in view of Husseiny and Bergholm et al., as applied to claim 4 above, and further in view of Pisello et al..

Kekic et al. in view of Husseiny and Bergholm et al. teach the method that includes the subject matter discussed above except: wherein identifying the one or more rules usable to calculate exhaustion of the equipment includes identifying at least one of a lifetime of the equipment and a capacity of the equipment.

Husseiny teaches a rule-based monitoring expert system, wherein a step of identifying the one or more rules usable to calculate exhaustion of the equipment includes identifying at least one of a lifetime of the equipment (col. 6, lines 9-19; col. 16, lines 38-56).

It would have been obvious to one having ordinary skill in the art at the time was made to include the teachings of Husseiny in the invention of Kekic et al. in order to provide a better rule-based monitoring expert system that is capable of examining the predictability of the system for predicting future trends and estimates of remaining life of an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6, lines 9-19; col. 16, lines 38-56).

Pisello et al. disclose a network management system, and teach a method for creating one or more analytical reports about the monitor set, including a step of identifying a capacity of the equipment (see Figs. 3A-B and 4A-B; col. 17, lines 19-43, lines 50-64 and col. 21, lines 55-62).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Pisello et al. analytical report in the combination of Kekic and Husseiny in order to recognize a variety of current status problems and perform various trend analysis on said equipment (Pisello et al., col. 17, lines 19-21).

9.   Claim 10-12, 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kekic et al. in view of Husseiny and Pisello et al..

Regarding claim 10, Kekic et al. teach a system for monitoring equipment in a telecommunications network (see abstract), comprising: a monitor set including at least one of either a subset of the equipment (col. 6, lines 14-39), a review period (col. 18, lines 19-32 and col. 20, lines 19-21), or a configuration for the equipment (col. 46, lines 36-52); a plurality of rules related to the monitor set (col. 23, lines 63-67 and col. 24, lines 20-28); means for obtaining data related to the monitor set (col. 8, lines 16-41; col. 15, lines 49-67; col. 18, lines 12-32, lines 45-55; col. 19, lines 1-7; col. 28, lines 6-8 and col. 36, lines 15-27); and a program for creating one or more analytical reports about the monitor set based on the rules and the data (col. 7, lines 61-67; col. 8, lines 1-41; col. 53, lines 57-67 and col. 54, lines 1-4).

Kekic et al. do not mention expressly: wherein at least one rule enables a prediction of equipment exhaustion; wherein at least one of the one or more analytical reports details a relationship between demand and capacity for at least a portion of the equipment.

Husseiny teaches a rule-based monitoring expert system wherein at least one rule enables a prediction of equipment exhaustion (col. 6, lines 9-19; col. 16, lines 38-56).

It would have been obvious to one having ordinary skill in the art at the time was made to include the teachings of Husseiny in the invention of Kekic et al. in order to provide a better rule-based monitoring system that is capable of examining the predictability of the system for predicting future trends and estimates of remaining life of an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6, lines 9-19; col. 16, lines 38-56).

Pisello et al. teach a program for creating one or more analytical reports about a monitor set, wherein at least one of the analytical reports details a relationship between demand and capacity for at least a portion of the equipment (see Figs. 3A-B and 4A-B; col. 17, lines 19-43, lines 50-64 and col. 21, lines 55-62).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Pisello et al. analytical report in the invention of Kekic et al. in order to recognize a variety of current status problems and perform various trend analysis on said equipment (Pisello et al., col. 17, lines 19-21).

Regarding claim 11, Kekic et al. further teach: a graphical user interface for receiving additional rules from a user and for providing the additional rules to the program (see Figs. 23-26; col. 6, lines 49-56; col. 40, lines 34-67; col. 41, lines 1-3, lines 24-33).

Regarding claim 12, Kekic et al. further teach: said program comprises: an inference engine having instructions for retrieving the data from a data layer of an inventory retrieval system (col. 3, lines 9-28; col. 16, lines 55-60; col. 18, lines 12-32, lines 45-55; col. 19, lines 1-7), determining if a match exists between the data and one or more of the rules, and selectively firing the rule on the data to produce an analysis, and to create the one or more analytical reports (col. 8, lines 16-41 and col. 36, lines 15-27).

Kekic et al. do not mention: wherein the one or more analytical reports include a prediction of equipment exhaustion.

Husseiny teaches a rule-based monitoring expert system, wherein the analytical report includes a prediction of equipment exhaustion (col. 6, lines 9-19; col. 16, lines 38-56).

It would have been obvious to one having ordinary skill in the art at the time was made to include the teachings of Husseiny in the invention of Kekic et al. in order to provide a better rule-based monitoring system that is capable of examining the predictability of the system for predicting future trends and estimates of remaining life of an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6, lines 9-19; col. 16, lines 38-56).

Regarding claims 16, 19 and 20, the teaching of Kekic further includes: wherein the configuration for the equipment is selected from a list of predetermined possible configurations (col. 15, lines 49-56; cols. 44-45, lines 58-8); wherein the rules are organized in a tree structure (col. 24, lines 20-28); wherein at least one of the rules includes an antecedent and a consequent (col. 49, lines 13-55; cols. 69-70, lines 7-6).

Regarding claim 17, Kekic et al. do not mention expressly that: wherein the at least one rule usable to predict exhaustion of the equipment includes a projected lifetime of the equipment.

Husseiny discloses a rule-based monitoring expert system, and teaches one or more analytical reports which include a prediction of exhaustion of the equipment and a projected lifetime of the equipment (col. 6, lines 9-19; col. 16, lines 38-56; col. 21, lines 14-41).

It would have been obvious to one having ordinary skill in the art at the time was made to include the teachings of Husseiny in the invention of Kekic et al. in order to provide a better rule-based monitoring system that is capable of examining the predictability of the system for predicting future trends and estimates of remaining life of an equipment based on statistical and model data analyses (Husseiny, Abstract; col. 6, lines 9-19; col. 16, lines 38-56).

Conclusion

10.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Response to Arguments

11.   Applicant's arguments filed 03/14/06 have been fully considered but they are not

persuasive.

Regarding claims 1 and 10, Applicant argued that the Kekic reference does not

teach "produce an analysis to create the one or more analytical reports". This argument

is not persuasive. The Examiner's position is that, giving the claim the broadest

reasonable interpretation, the Kekic reference does teach this limitation. In particular,

Kekic teaches (cols. 27-28, lines 44-8): "logging pertinent information", displaying "the

severity associated with a element component's state", notifying the user "whenever

information is logged" by "visual cue", etc. The teaching of Kekic reads on the claims.

The rejection is therefore maintained.

In response to Applicant's arguments about the Husseiny reference, the

Examiner considers that the Kekic reference does not mention expressly "an analytical

report which includes a prediction of exhaustion of the equipment". The combination of

Kekic with Husseiny's teaching of the concept and the implementation of this limitation (col. 6, lines 9-20) reads on the claim. The combination of the references is proper. The rejections stand.

Regarding claim 4, Applicant argued that the Kekic reference fails to teach "defining a review for the selected configuration identifying one or more rules", and "receiving a comparison of the data and the defined rule". These arguments are not persuasive. The Examiner's position is that, giving the claim the broadest reasonable interpretation, the Kekic reference does teach these limitations. Specifically, Kekic teaches "defining a review for the selected configuration, the review identifying one or more rules" (see Figs. 37F-37M; col. 20, lines 19-34; cols. 27-28, lines 44-8 and col. 69, lines 7-67); and "receiving a comparison of the data and the review" (col. 7, lines 61-67; col. 8, lines 1-41; cols. 27-28, lines 44-8; col. 53, lines 57-67 and col. 54, lines 1-4). The teaching of Kekic reads on the claim. The rejection is therefore maintained.

In response to Applicant's arguments about the desirability of the combination of the cited prior art teachings for the rejections set forth above, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The Examiner further recognizes that the test for obviousness is not whether the features of a second reference may be bodily incorporated into the

structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, it is deemed that the asserted references could be combined because they were all directed to solving the same problem or in the same area of equipment monitoring and management. Moreover, for each combination of the references for rejecting the claims 1, 4 and 10, the Office Action has provided specific motivation statement supporting the desirability of the combination, together with the basis in the art (see sections 5-9 set forth above). Therefore, Applicant's arguments in this regard are not persuasive.

In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily in a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. *In re McLaughlin*, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971).

Contact Information

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun
Examiner
Art Unit 2863

XS
May 12, 2006

MICHAEL NGHIEM
PRIMARY EXAMINER